

**COMMENTS OF THE INTERSTATE RENEWABLE ENERGY COUNCIL, INC.
ON THE CALIFORNIA NET ENERGY METERING (NEM) DRAFT
COST-EFFECTIVENESS EVALUATION**

October 10, 2013

The Interstate Renewable Energy Council, Inc. (“IREC”) respectfully submits these comments regarding the *California Net Energy Metering (NEM) Draft Cost-Effectiveness Evaluation* (“Draft Report”), prepared by Energy + Environmental Economics (“E3”). IREC is a U.S. Internal Revenue Code § 501(c)(3) non-profit organization that enables greater use of clean energy in a sustainable way through regulatory policy innovations, removal of technical constraints and coordination of national policy. IREC has been engaged in the stakeholder process throughout E3’s preparation of the Draft Report and appreciates E3’s continuing consideration of stakeholders’ input.

In its introduction to the Draft Report, the California Public Utilities Commission (“Commission”) requests that comments, “focus on and be limited to errors in the calculations used in the report,” and IREC addresses three errors in Sections II through IV below. As well, taking some liberty from the Commission’s directive, IREC addresses in Section I the need for greater clarity regarding the results and limitations of the study process.

I. E3 and the Commission Should Clarify the Results and Limitations of the Report.

IREC appreciates that the comments on the Draft Report are to focus on calculation errors, but at an even more basic level, the study process and results are not being properly interpreted and the final report should correct this problem. IREC is primarily concerned with the perceptions that have filtered out to the public since the Energy Division’s release of the Draft Report. A simple internet search reveals multiple news articles reporting, matter-of-factly, that NEM represents a \$1 billion per year subsidy. While it is not necessarily the Commission’s responsibility to explain methodological nuance to the press, IREC proposes that the Commission be cognizant of how the Draft Report is being perceived. IREC suggests that it would be reasonable to take action on this politically charged issue to ensure that the final report is not misperceived with detrimental public impact.

To the extent public opinion is impacted by perceptions or misperceptions of the results of this report, and the findings carry the weight of a Commission-sanctioned document, IREC suggests that the Commission ensure that these results are perceived in a fair light, especially given the broad dissemination of the results of this report across the country. A more direct summary of the results and limitations of the report would be very helpful, both in the Commission's introduction and in E3's executive summary.

To the Energy Division's credit, the *CPUC NEM Report Introduction* explicitly emphasizes that the Draft Report "likely overestimates the costs that are directly associated with NEM." [p.2] This statement standing alone, however, does not appear to have had sufficient impact in providing the necessary analysis to temper public perception or to ensure that the public is adequately informed about the meaning of E3's technical report. IREC suggests that the Energy Division's message would be more effectively communicated through a summary of the actual numbers reported by E3 and a short bullet list of the caveats.

Topping that list of results should be the very significant finding that NEM customers in the aggregate pay more for their service than it costs to serve them, meaning that there is no subsidy. This fact is not mentioned in the Energy Division's discussion on page 3 of the introduction, though it should be the primary result highlighted for the media and the legislature. Within the E3 Draft Report, it gets no mention until page 10, and even then it is couched in the indirect language that the "aggregate gap between bills and the full cost of service shrinks dramatically," meaning that NEM customers used to pay a lot more than their cost of service, and now just pay a little bit more than their cost of service. This description fails to highlight the primary fact that NEM customers are not being subsidized.

After highlighting the cost of service results, the Energy Division might want to summarize the discussion on page 4 of the NEM Study Introduction, to explain why the requirement in AB 2514 to consider all generation, and not just the "export only" scenario as had been done in the past, is not the usual or preferred methodology for the Commission to determine the cost-effectiveness of NEM. Next, it is critical for the summary to highlight the fact that AB 327 will have significant impacts on the report's results, pointing out that the E3 final report provides its own warnings that rate design appears to responsible for the majority of impacts. The Energy Division does do this on page 5, but can go farther by stating that the reported results

should not be the basis for NEM program revisions in the future. It is also unfortunate that the results are presented in the “2020 snapshot” form, rather than as a lifecycle analysis. A lifecycle analysis would capture the long-term benefits of solar, including fuel price hedging and greenhouse gas mitigation. Lastly, it is important to note that E3 did not consider any societal benefits, including economic and environmental benefits associated with solar. These benefits are quantifiable, but E3 intentionally excluded those considerations from its report.

IREC believes that it is important for the Commission to communicate clearly and objectively to the public. A Commission-sanctioned report will carry great weight and authority, so the Commission has a duty to make sure that information is presented responsibly. IREC appreciates that the Energy Division has already made most of the statements that IREC requests to be highlighted in an executive summary.

II. Avoided Capacity Values Should Be Included From Day One in the Base Case

IREC continues to question the sensibility of E3’s decision to exclude generation capacity value in the base case until the Resource Balance Year (“RBY”) of 2017. As IREC noted in comments on the Scope of Work for this report, it is far more sensible to reflect capacity value from an RBY of 2011 in the base case, as net-metered capacity has been baked into peak load forecasts for a number of years. The base case should reflect capacity value as of day one, and that value should not just be diminished in weight as a sensitivity. Beyond those concerns, IREC does raise one apparent calculation error. On Table 7, page C-30 of Appendix C, the list of available capacity resources appears to include the capacity of the now shuttered San Onofre Nuclear Generating Station (SONGS) under the nuclear category. IREC previously flagged this issue in its opening comments, and encouraged E3 to account for the strong likelihood that SONGS could no longer be counted on to meet resource needs. In light of the timing of subsequent events, with SCE publicly announcing its intent to permanently shut down SONGS Units 2 and 3 in June 2013, IREC suggests that E3 should have excluded any capacity from SONGS after 2012.

III. E3 Should Justify Its Assumptions for the SDG&E Cost of Service Study.

IREC appreciates the Draft Report’s presentation of the cost of service studies and appreciates the difficulty of the task E3 faced in performing these analyses. There are many positive lessons from these studies, which indicate, overall, that net metering customers are covering their fair share of the utility’s cost of service. IREC agrees with the basic

methodological approach of distinguishing what it costs specifically to serve customer-generators, specifically, as they are a class with distinct operational characteristics. This approach can be expected to capture the benefits that customer-generators provide when they offset consumption during peak times and reduce strain on available distribution capacity. Accordingly, IREC questions why E3 adopted SDG&E's recommendation that net metering customer's "entire distribution capacity costs be assigned to accounts based on the maximum demand of the account." [Page D-51].

The position that E3 adopted essentially means that there is no difference between the cost of serving customer-generators and other non-participating customers in the same class. IREC does not understand the justification for this approach, since distribution capacity costs are not currently assigned to 100% to non-coincident demand (i.e., "maximum demand of the account") in SDG&E's rate design. In fact, it was SDG&E's litigation position in their most recent rate case that distribution capacity costs should shift toward 100% non-coincident peak demand, but the Commission has not reached a final decision on that case. The disparity between the cost of service results for SDG&E and the other IOUs for residential customers suggests that this methodological approach is incongruous and should not be averaged in with the other results. Including SDG&E's recommended approach skews the results downward, suggesting that residential solar customers fail to cover a significant portion of the costs of service. IREC suggests that E3 either re-run its analysis of SDG&E's cost of service, or exclude SDG&E's results from the average cost of service numbers given on page 10 of the Draft Report. At a minimum, E3 should provide a more thorough explanation for why it adopted SDG&E's recommendation and why the percent cost of service recovery for residential customer, even without DG, is so low in comparison to SCE and PG&E.

IV. Income of NEM Participants

IREC is also concerned that the report presents a skewed comparison of residential NEM customers to non-participating customers in terms of median household income. IREC is concerned that the comparison against all California households creates a bias that does not reflect the fact that NEM is typically limited to customers that own their residences. Renters are generally not able to participate in NEM, outside of a limited set of circumstances. Accordingly, a more apt comparison would be to compare the median income of NEM customers to the overall median income of homeowners in California.

The Draft Report notes that the median household income of NEM customers is approximately \$24,000 per year (or 34.4%) above the median income of all California households. This comparison is of little value. The 34.4% difference in median income says more about the income gap between renters and homeowners than it does about NEM customers versus non-participating customers. [Page E.13]. The more appropriate comparison—to determine the characteristics that separate those who participate and those who could, but choose not to participate—would be to compare the median household income of NEM customers against only **homeowners** in the state. When compared against this reference group, solar NEM customers' median household income of \$91,210 is just 14% more than the statewide median household income of owner-occupied houses of \$79, 895 (using 2012 data).¹

NEM customers are representative of the household income of the average homeowner in California and should be portrayed as such. IREC suggests that more renters would participate in NEM if it were made available through some form of community/shared solar project, which would significantly impact the median household income of NEM participants.

Respectfully Submitted on October 10, 2013,

/s/

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¹ While the U.S. Census website was not accessible for these comments due to the current federal shutdown, these figures were obtained through www.censusreporter.org and are based on aggregate, statewide data from the 2012 American Community Survey.